

# Insulate Conditioned Crawl Space Wall

Job Aid for Air Seal and Insulate Walls of a Conditioned Subspace (Basement or Crawl Space) Badge

Aligns With Standard Work Specifications 4.0402.2, 4.0402.4, 4.0402.5



Unvented crawl spaces are sometimes considered to be part of the conditioned space, so the walls need insulation.



When using foam products, ensure the material meets fire safety requirements of the authority having jurisdiction.



Attach insulation in a durable manner and seal seams and edges with compatible materials.



Leave a 3-inch termite inspection gap between the bottom of the sill plate at the top of the insulation, if required.



Insulation is or has class II vapor retarder facing conditioned space. Insulation laps underneath ground vapor retarder at foundation wall.



#### Checklist

## Air seal and insulate walls of a conditioned subspace (basement or crawl space)

#### **DESIRED OUTCOME**

Subspace is air sealed and insulated to achieve best thermal performance possible while preventing moisture condensation on the inside of band joists or other wall cavities.<sup>1</sup>

### Air sealing:

Rim joist, sill plate, and adjacent surfaces and any walls to be treated were sufficiently cleaned and free of debris to allow for the proper adhesion of any caulks, adhesives, or spray foam used during installation.

All penetrations greater than ¼" filled with backing, steel wool, or other pest-proof material before air sealing.

Air sealing forms a continuous air barrier on the warm side of the thermal boundary, including

floor-to-wall and wall-to-ceiling connections.

#### Insulation:

On walls (basements² or crawl spaces), attach insulation with a durable connector equal to or better than manufacturer specifications.
 On rim joists, install foam-based or vinyl-faced fiberglass batt insulation tightly to the cavity and seal at all edges.
 Use fire-rated material if the insulation is to be left exposed.
 Ensure that the insulation has no gaps, voids, compression, or misalignment.
 Fill out applicable sections of the house-wide insulation certificate with coverage area, thickness, and R-value.

- 1. Relevant Standards: 4.0402.2 4.0402.4, 4.0402.5
- 2. Where termite pressure exists, a 3-inch inspection gap will be maintained from the top of the insulation to the bottom of any wood to allow for termite detection. This varies by region and should be incorporated into the badge inspection criteria where applicable.



For more information, visit: energy.gov/eere/wap

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